Culminating Task: What am I Drinking?

You are going to receive a sample of drinking water and it will be up to your group to determine what ions are present in the drinking water – you will be given the choice of 2 or 3 ions that are possibly present in the water. You will decide how you are going to test your sample and upon approval from you teacher, you will test your water sample.

Part 1a: Water Testing

You will be given a sample of water with possible contaminants in the sample. It is up to your group to decide how you are going to test the sample, to determine what ions are present. You must include a flowchart clearly outlining how you are going to test for your contaminant(s). Once you have your determined your procedure, be sure to get approval from your teacher. You will then carry out the testing to determine the identity of your contaminant. You will be required to provide a justification as to why you identified the contaminant in the way you did.

Part 1b: Representing Reactions Using Equations

You will be writing out the balanced equations for all reaction occurring, including total and net ionic equations. Be sure to include the states of all substances as well as ion charges.

Evaluation

Category	Criteria	Scale (Mark)
Part 1 – [I]	Plan is highly detailed, useful, effective and flexible	0 1 2 3 4
	Plan is carried out and when appropriate, insightful modifications are made to solve unanticipated problems	0 1 2 3 4
	Thorough and accurate testing is performed	0 1 2 3
	Correct identification of contaminant	0 1 2
	Detailed justification of identity of contaminant	0 1 2 3
Part 2 – [K/U]	All relevant balanced equations are correct	0 1 2 3
	All total ionic equations are correct	0 1 2 3
	All net ionic equations are correct	0 1 2 3
	States of all substances included	0 1 2
	All ion charges included	0 1 2

Total:

Inquiry: /16

Knowledge/Understanding: /13

Comments: